

REMARKS

Claims 18-22, 24-39, 41-43 and 45-55 are presently pending in this application. Claims 40, 44 and 71-81 have been cancelled without prejudice, and claims 19-22, 24-28, 31, 33-35, 38, 42 and 49 have been amended in this paper. The present application is a continuation application that includes claims directed to subject matter that was cancelled or deleted through amendment in the parent application. The owners of the present application continue to reserve the right to pursue the subject matter of the originally filed claims or claims without the foregoing amendments, and/or in other forms, in a subsequent continuation application.

As a preliminary matter, the undersigned representative would like to thank Examiner Butler and SPE Johnson for holding a personal interview on January 24, 2008. During the interview, Examiner Butler and SPE Johnson agreed that the originally filed specification supports the inclusion of the term "cured" into the independent claims as the term is use in Paragraphs [0002] and [0004] of the originally filed specification and defined in the Declaration of John T. Whitehead under 37 C.F.R. § 1.132 filed concurrently with this paper (the "Whitehead 1.132 Declaration"). Examiner Butler and SPE Johnson also agreed that the filamentary mats taught by U.S. Patent No. 3,962,941 issued to Kober ("Kober") appear to be uncured. The following remarks expand upon the discussions of the interview, and the applicants accordingly request that this paper constitute the Applicant's Interview Summary.

The current Office Action dated July 26, 2007, sets forth the following rejections:

(A) claim 75 was rejected under 35 U.S.C. § 112, first paragraph;

(B) claim 79 was rejected under 35 U.S.C. § 112, second paragraph;

(C) claims 18, 19, 30 and 31 were rejected under 35 U.S.C. § 103 over the combination of Kober and U.S. Patent No. 4,580,374 issued to Quinnell ("Quinnell");

(D) claims 20-22 and 33-55 were rejected under 35 U.S.C. § 103 over the combination of Kober, Quinnell, U.S. Patent No. 4,246,815 issued to Hugo ("Hugo"), and the Background Information in Paragraph [0006] of the present application (the "Background Information");

(E) claims 24 and 25 were rejected under 35 U.S.C. § 103 over the combination of Kober, Quinnell and U.S. Patent No. 4,985,119 issued to Vinson et al. ("Vinson");

(F) claims 26-30 and 59-61 were rejected under 35 U.S.C. § 103 over the combination of Kober, Quinnell, Vinson, Hugo and the Background Information;

(G) claims 71-75 and 77-81 were rejected under 35 U.S.C. § 103 over the combination of U.S. Patent No. 2,230,043 issued to Moran ("Moran"), Kober and Quinnell; and

(H) claims 71, 76 and 80 were rejected under 35 U.S.C. § 103 over the combination of Kober, Quinnell and U.S. Patent No. 2,225,342 issued to Hyatt ("Hyatt").

A. Response to Section 112, First Paragraph, Rejection

Claim 75 was rejected under 35 U.S.C. § 112, first paragraph, on the grounds that the term "at least co-extensive" was not supported by the originally filed specification. The applicants respectfully disagree with this finding, but claim 75 has been amended to read "the resilient biasing element has a length that is at least approximately equal to or exactly equal to a length of a punch adjacent to the biasing element." This amendment is made solely for the purpose of expediting prosecution. Support for the amendment to claim 75 can be found at, for example, the last sentence of Paragraph [0024] and in Figure 3A. Therefore, withdrawal of the Section 112 rejection of claim 75 is respectfully requested.

B. Response to Section 112, Second Paragraph, Rejection

Claim 79 was rejected on the grounds that the phrase "the polymeric resilient member" does not have sufficient antecedent basis. Claim 79 has been amended to

delete the term "polymeric" because the inclusion of this term was a clerical oversight. Thus, this rejection of claim 79 should be withdrawn.

C. Response to Section 103 Rejection of Claims 18, 19, 31 and 32

Claims 18, 19, 31 and 32 were rejected under 35 U.S.C. § 103 over the combination of Kober and Quinnell. Claims 19 and 31 are the independent claims subject to this rejection, and the patentability of these claims will be discussed separately.

1. Claims 18 and 19

Claim 19 is directed toward a method of fabricating a fiber-cement soffit comprising providing a cured fiber-cement panel having a length, a width and a thickness for producing ventilated fiber-cement soffit. As set forth in the specification, cured fiber-cement panels for siding are defined as a "fiber-cement composition [that] is pressed, cured, and then cut into panels, shakes and planks to form finished siding products that are ready to be installed on a structure." (U.S. Patent Application Publication No. US 2002/0109257A1, Paragraph [0002] at lines 12-14.) The cured fiber-cement panels in the process of claim 19 are made from the same type of panels. The method of claim 19 further includes placing the cured fiber-cement panel between a punch assembly and a support assembly. The punch assembly has a punch plate and a plurality of punches coupled to the punch plate, and the support assembly has a support plate with a plurality of holes. The method further includes driving the punches into and through at least a portion of the thickness of the fiber-cement panel to form a plurality of apertures in the fiber-cement panel by ejecting plugs from the fiber-cement panel through the holes in the support plate. The fiber-cement panel has a thickness of approximately 0.25-0.31625 inch, and the punches penetrate into the panel to a depth of approximately 0.0625-0.1875 inch without passing the punches completely through the panel. The process thereby produces a ventilated fiber-cement soffit.

In rejecting claim 19 over the combination of Kober and Quinnell, the Examiner states Kober teaches a method for perforating and trimming "boards" of filamentary

material including providing a fiber "plate." The Examiner further cites Kober for the proposition that it discloses depositing the fiber plate on one of a series of trays, passing each of the trays into a press comprising an upper platen having a plurality of punch means for punching an array of holes in the fiber plate, and a lower platen for supporting the fiber plate during perforating and trimming. The Examiner admits that Kober does not specifically teach that the filamentary mats are capable of being used as soffit boards, but the Examiner cites Quinnell as teaching a soffit and fascia system comprising cement-based asbestos boards for use as soffit boards including a plurality of ventilation slots formed in each soffit board. The owners of the present application respectfully submit that the Examiner is incorrect and has misunderstood the teachings of both Kober and Quinnell. As explained in further detail below, Kober discloses an uncured filamentary mat that has significantly different properties than the cured fiber-cement panels, and as a result Kober does not recognize that the punch penetration depth is a result-effective variable. Also, a person skilled in the art would not punch holes into Quinnell's asbestos boards to produce a ventilated soffit using Kober's system and process.

Kober is directed toward an apparatus and method for perforating and trimming uncured filamentary mats composed of asbestos, cement and a hydraulic binder. During the personal interview on January 24, 2008, Examiner Butler and SPE Johnson agreed that Kober appears to disclose only uncured filamentary mats as set forth in the Whitehead 1.132 Declaration at Paragraphs 8 and 9. Evidence that Kober's filamentary mats are uncured includes Kober's teaching that the moisture content of Kober's filamentary mats is sufficiently high to require a vacuum pump to remove the liquid expressed from the hydraulic binder and the fiber forming the mats during punching. (Kober, column 3 at lines 28-32.) Additional evidence that Kober's filamentary mats are uncured includes Kober's teaching that the mats are subject to being extruded between the holes in the trays supporting the mats and the tubes with the die apertures. (Kober, column 2 at lines 17-26 and 58-64.) Kober, moreover, teaches that the uncured filamentary mats must be supported by a moving tray to maintain the shape of the mats during processing. Kober's mats, therefore, are not rigid, hard "boards" or "plates" as stated in the rejection of claim

19, but rather Kober's mats are an uncured material that is limp and deformable. The properties of Kober's uncured filamentary mats require different processing parameters than the processing parameters used to punch holes through the cured fiber-cement panels provided in accordance with claim 19. As such, the punch penetration depth and the punch-die clearance are not result-effective variables as explained in more detail below.

Quinnell is directed toward a soffit and fascia system. Quinnell teaches it is known to use a plurality of interlocking panels as soffit, and that it is sometimes preferred to use soffits of other rigid sheet materials, such as asbestos board. (Quinnell, column 1 at lines 15-22.) Quinnell does not disclose that the plastic soffit or the asbestos-cement soffit boards disclosed at column 1, lines 15-22, have vent holes directly through the boards. Vent holes, moreover, are not inherently required to pass through the material of the boards. For example, as late as 1995, CertainTeed® advertised non-vented fiber-cement soffit. (CertainTeed Specification Sheet for CertainTeed WeatherBoards™ Fiber-cement Soffit dated 12/05 enclosed herewith.) With respect to ventilation, Quinnell teaches that one proposed ventilated soffit uses ventilation slots in the cement-based soffit board itself. (Quinnell, column 2 at lines 25-29.) However, when discussing the cement-based soffit boards with ventilation slots through the material of the boards, Quinnell further teaches that the production of slots in the soffit board itself adds to the expense, which is "unsatisfactory" in the context of a low-cost system using cement-based soffits. (Quinnell, column 2 at lines 30-38.) Quinnell follows the teaching that it is "unsatisfactory" to form ventilation slots through the material of cement-based soffit boards by stating that his invention overcomes such problems by using a soffit board without ventilation holes in combination with a separate, pre-formed plastic ventilator panel that is interposed between two lengths of soffit boards. (Quinnell, column 2 at lines 39-45.) Therefore, with respect to producing cement-based soffit boards with "ventilation slots formed in each soffit board," Quinnell's only specific teaching is that it is "unsatisfactory" to form slots through such boards.

Claim 19 is patentable over the combination of Kober and Quinnell because this combination of references fails to disclose or suggest several features of claim 19. For example, Kober and Quinnell fail to disclose or suggest driving punches into and through at least a portion of a thickness of the cured fiber-cement panels such that the punches penetrate into the panel to a depth of approximately 0.0625-0.1875 inch without passing the punches completely through the panel. Kober fails to disclose or suggest penetrating the punches into a cured fiber-cement panel, and Kober also fails to disclose or suggest ejecting plugs from the panel to form vent holes without passing the punches completely through the panel. For the reasons explained above and supported by the evidence in Paragraphs 8 and 9 of the Whitehead 1.132 Declaration, Kober teaches punching holes in an uncured filamentary mat instead of a cured fiber-cement panel. A person skilled in the art would understand that the punches disclosed in Kober need to pass completely through Kober's uncured filamentary mats because passing Kober's punches through only a portion of the thickness of Kober's mats would not form holes completely through the mats. (Whitehead 1.132 Declaration at Paragraph 10.) The properties of Kober's uncured mats are significantly different than the cured fiber-cement panels provided in the process of claim 19, and because of these different properties the waste material would not be fully ejected from Kober's mats if the punches disclosed in Kober did not pass completely through the mats. (Whitehead, 1.132 Declaration at Paragraph 10.) More specifically, Kober requires the punches to pass completely through the mats because if Kober's punches did not pass completely through Kober's mats, then the material of Kober's mats would be compressed and partially extruded into the dies (i.e., the tubes 18) without being fully ejected from the uncured mats. Kober further teaches that the punches pass completely through his uncured filamentary mats because Kober's trimming blades and punches are the same length and both pass completely through the uncured mats until the punches reach the top of the bores of Kober's die tubes. Moreover, Kober's only specific teaching regarding punch penetration depth is the last element of claim 1 which requires pressing the punch pins through the mats, through the holes in the trays that support the mats, and into the apertures of the dies. (Whitehead 1.132 Declaration at Paragraph 10.)

Kober does not otherwise expressly teach that the punch penetration can be varied. Additionally, because Kober's filamentary mats compress under the pressure of the punches, the waste material would expand as it enters the flared passages and clog the flared passages if Kober's punches do not pass completely through the filamentary mats. (Whitehead 1.132 Declaration at Paragraph 10.) Kober accordingly teaches and inherently requires that the punches pass completely through the uncured mats for effective operation of Kober's process. A person of ordinary skill in the art would understand that Kober does not recognize punch stroke penetration depth as a result-effective variable for at least the reason that the claimed penetration depths would not form holes completely through Kober's uncured mats. (Whitehead 1.132 Declaration at Paragraph 10.) Quinnell does not teach anything regarding punching or punch penetration depths. Claim 19, therefore, is patentable over the combination of Kober and Quinnell under Section 103 because this combination of references fails to disclose at least one feature of claim 19.

In rejecting claim 19 over the combination of Kober and Quinnell, the Examiner admits that Kober and Quinnell do not expressly teach that the punches do not pass completely through the cured fiber-cement panels. To overcome this shortcoming, the Examiner asserts "Kober obvious [sic] recognizes that penetration depth is a result-effective variable" on the grounds that Kober's platen descends so that the punch pins perforate the mat and drive the plugs out of the bores. The Examiner specifically cites column 4, lines 24-35, of Kober for this proposition, but this portion of Kober does not mention anything regarding punch penetration depth. The Examiner is incorrect because Kober cannot recognize punch penetration depth as a result-effective variable that would be optimized for other applications through routine experimentation. As explained above and as set forth in Paragraph 10 of the Whitehead 1.132 Declaration, Kober expressly teaches and inherently requires that Kober's punches pass completely through Kober's uncured filamentary mats otherwise holes would not be formed completely through Kober's uncured mats. Under M.P.E.P. § 2144.05(II)(B), a result-effective variable is a variable which achieves a recognized result. With respect to Kober's uncured filamentary mats, modifying the punch penetration depth so that the punches do not pass completely through

the uncured filamentary mats would not achieve the result of "ejecting plugs" from the filamentary mats to form holes that pass completely through the mats. The claimed punch penetration depths would accordingly destroy the purpose of Kober's device and process, and it follows that a person of ordinary skill in the art would not modify Kober to pass the punches through only a portion of the thickness of Kober's uncured filamentary mats. Therefore, the Examiner's primary grounds for rejecting claim 19 are incorrect, and the owners of the application respectfully request withdrawal of this rejection.

Claim 19 is further patentable over the combination of Kober and Quinnell because a person skilled in the art would not punch vent holes in the asbestos cement boards taught in Quinnell using the device and process taught in Kober. First, Kober's device and process for punching holes in uncured filamentary mats is not suitable for punching vent holes in cured fiber-cement panels. As explained in Paragraph 14 of the Whitehead 1.132 Declaration, a person skilled in the art would understand that Kober teaches and requires his punches to pass completely through to his uncured mats, which may cause delamination problems in cured fiber-cement panels. Second, Quinnell teaches away from forming holes through cement-based boards to produce ventilated soffit. The Examiner cites column 1, lines 15-22, of Quinnell for the proposition that Quinnell teaches using asbestos-cement boards for soffit. This portion of Quinnell, however, does not teach that the cement-based boards are ventilated, and it is not inherent that the cement based boards in this portion of Quinnell were ventilated. In contrast to the Examiner's position, the only portion of Quinnell that discusses forming ventilation slots directly through the asbestos cement boards expressly teaches that the production of slots in the soffit board adds expense and is "unsatisfactory" in the context of low-cost systems. Therefore, when Kober and Quinnell are taken together, a person of ordinary skill in the art would not punch vent holes in the asbestos cement boards taught in Quinnell using Kober's process to produce vented fiber-cement soffits.

Claim 18 depends from claim 19, and therefore claim 18 is patentable over the combination of Kober and Quinnell for the reasons explained above, and also because of

the additional features of claim 18. Therefore, the owners of the present application respectfully request withdrawal of the rejection of claims 18 and 19 over the combination of Kober and Quinnell.

2. Claims 31 and 32

Claim 31 is directed toward a method of fabricating a fiber-cement soffit comprising providing a cured fiber-cement panel, and engaging an active drive assembly with the fiber-cement panel. The active drive assembly has a first drive member contacting one surface of the fiber-cement panel and a second drive member opposing the first drive member contacting an opposite surface of the fiber-cement panel. The method further includes moving the first and second drive members such that the drive members feed the fiber-cement panel between a punch assembly and a support assembly. The punch assembly has a punch plate with a plurality of punches, and the support assembly has a support plate with a plurality of holes. The method further continues by forming a plurality of apertures in the fiber-cement panel by driving the punches through only a portion of the fiber-cement panel without passing the punches completely through the panel. The process of claim 31 thereby produces a ventilated fiber-cement soffit.

As a preliminary matter, support for the term "cured" is explained above with respect to the rejection of claim 19. Support for the phrases "engaging an active drive assembly with the fiber-cement panel" and "moving the first and second drive members such that the drive members feed the fiber-cement panel" can be found at, for example, Paragraphs [0035] - [0037] and Figure 5 of the originally filed specification. The originally filed specification discloses that the punch press includes a first active roller assembly that includes drive members (e.g., rollers or belts) that engage the top and bottom surfaces of the fiber-cement panel. In operation, the first active roller assembly rotates at a relatively low rotational velocity to draw the panel towards the punch assembly, and then the first active roller assembly can rotate at a relatively high velocity to position the panel between

the punch assembly as shown in Figure 5. Therefore, the amendments to claim 31 are fully supported by the originally filed specification.

Claim 31 is patentable over the combination of Kober and Quinnell because this combination of references fails to disclose or suggest several features of this claim. For example, the combination of Kober and Quinnell fails to disclose or suggest forming a plurality of apertures in a cured fiber-cement panel by driving punches through only a portion of the thickness of the fiber-cement panel without passing the punches completely through the panel. For the reasons explained above with respect to claim 19, Kober fails to disclose or suggest driving the punches through only a portion of the thickness of Kober's uncured filamentary mat such that the punches do not pass completely through Kober's uncured mats. (Whitehead 1.132 Declaration at Paragraph 10.) Claim 31 is accordingly patentable over the combination of Kober and Quinnell for reasons that are analogous to those explained above with respect to claim 19.

Claim 31 is also patentable over the combination of Kober and Quinnell under Section 103 because the Examiner's primary rationale supporting this rejection is without merit. In rejecting claim 31, the Examiner "stipulates" that Kober indirectly teaches the concept of driving the punches through only a portion of the thickness of the fiber-cement panel without passing the punches completely through the panel. The applicants do not concede or agree to such a stipulation because the Examiner is factually incorrect. More specifically, the Examiner contends that Kober teaches trimming blades 25 with cutting edges that are engageable against lead anvil strips. The Examiner asserts "[A]s illustrated in the figures, Kober further teaches that the punch means 8 are slightly shorter, but definitely not longer, in length than the trimming blades 25." The Examiner then concludes "[I]f the travel of the trimming blades 25 in the upper platen 9 stops when the trimming blades engage the lead anvil strips 26 as taught and the punch means 8 are slightly shorter in length than the trimming blades 25, the punch means 8 in the process of Kober would obviously pass through only a portion of a fiber plate 3 and would obviously be prevented from passing completely through the fiber plate 3 as claimed." The Examiner's

reading of Kober and his conclusion are completely incorrect. First, Kober's trimming blades and punches are shown in line drawings without any dimensions, and the thickness of the lines of the trimming blade follow Patent Office requirements regarding shading. Such shading appears to artificially enhance the length of Kober's trimming blade. Nonetheless, even when these components are measured from the bottom of Kober's plate 9b, the illustrated trimming blades 25 and punches 10 have an equal length. This directly refutes the Examiner's contention that Kober's punches are slight shorter than Kober's trimming blades. It follows, therefore, that Kober's punches 10 at least reach the top of the bores of the dies when the trimming blades engage Kober's lead anvil strips. Moreover, lead is a relatively soft material and Kober's trimming blades would likely form depressions in Kober's lead anvil strips such that the bottom of Kober's punches would pass completely through Kober's uncured mats and into the bores of Kober's dies. (Whitehead 1.132 Declaration at Paragraph 11.) Therefore, the Figures of Kober and the evidence of record establishes that the Examiner's assertion is factually incorrect such that claim 31 is further patentable over the combination of Kober and Quinnell.

Claim 31 is also patentable over the combination of Kober and Quinnell because a person of ordinary skill in the art would not punch vent holes in the asbestos cement boards taught in Quinnell using the device and processes taught in Kober. As explained above with reference to claim 19, Kober's device and process for punching holes in uncured filamentary mats would not be suitable for punching vent holes in cured fiber-cement panels, and Quinnell teaches that it is "unsatisfactory" in the context of low-cost systems to form vent slots directly in cement-based boards. Claim 31, therefore, is further patentable over the combination of Kober and Quinnell because it is improper to combine these references to come up with the claimed combination of features.

Claim 32 depends from claim 31, and therefore claim 32 is patentable over the combination of Kober and Quinnell for the reasons explained above, and also because of the additional features of claim 32. Therefore, the owners of the present application

respectfully request withdrawal of the rejection of claims 31 and 32 over the combination of Kober and Quinnell.

D. Response to Section 103 Rejection of Claims 20-22 and 33-55

Claims 20-22 and 33-55 were rejected under 35 U.S.C. § 103 over the combination of Kober, Quinnell, Hugo and the Background Information. Claims 20-22 and 33-37 depend from independent claims 19 and 31, respectively. Claim 38, 42 and 49 are the independent claims subject to this rejection, and claims 38 and 42 differ from claim 49. The claims subject to this rejection are accordingly grouped into patentably distinct groups as set forth below.

1. Claims 20-22 and 33-35

Claims 20-22 and 33-35 were rejected over this combination of references based on the Examiner's characterization and understanding of Kober and Quinnell as applied to claims 19 and 31 explained above. The Examiner asserts that Kober's punches have a first diameter and his holes have a second diameter "to provide a radial punch/hole clearance between the punches and the holes." (July 26, 2007, Office Action at page 8 citing Kober, column 3, lines 28-59.) The Examiner admits that Kober does not specifically teach the claimed diameters of the punches and holes, but the Examiner cites column 4, lines 11-16, of Kober and asserts "Kober obviously recognizes that the arrangement of the pins 10 and the tubes 18 is a result-effect variable." As is explained in more detail below, the Examiner is incorrect because Kober teaches that the punches and die holes have equal or substantially equal diameters and the claimed punch-hole clearances would not work for Kober's uncured filamentary mats.

Claims 20-22 include the features of claim 19 and further include specific clearances between the punches and holes in the support plate. Claim 20 claims a radial punch-hole clearance of approximately 0.04-0.07 inch. Claim 21 claims a radial punch-hole clearance of approximately 4%-30% of the second diameter of the die holes, and claim 22 claims a radial punch-hole clearance of approximately 4%-40% of the thickness of

the cured fiber-cement panel. Claims 33-35 depend from claim 31 and have analogous radial punch-hole clearances as in claims 20-22, respectively.

Claims 20-22 and 33-35 are patentable over the cited combination of references because the claimed radial punch-hole clearances would destroy or at least impair Kober's ability to punch clean holes through his uncured mats. First, Kober expressly teaches that the diameters of his punches and die-holes must be equal or substantially equal. (Kober at column 2, lines 2-5, and column 3, lines 32-35.) Further, as set forth in Paragraph 11 of the Whitehead 1.132 Declaration, if Kober used the claimed radial punch-hole clearances, then Kober's punches would likely pull fibers from Kober's filamentary mats into the claimed clearance gaps between the punches and the bores. Such "fiber pull" into the bores of the dies would result in jagged or fuzzy edges around the holes at the backside of the mats. (Whitehead 1.132 Declaration at Paragraph 11.) The pulled fiber may also curl or spring back into the holes formed in the mat as it is lifted from the lower platen. (Whitehead 1.132 Declaration at Paragraph 11.) A person skilled in the art, therefore, would understand that Kober does not recognize the radial clearance between the punches and the dies as a result-effective variable because the result of providing a clean hole is not achieved using the claimed radial clearances between the punches and the dies. It also follows that a person of ordinary skill in the art would not modify Kober based on Hugo to use the claimed radial punch/die-hole clearances in light of Kober's mat material. Claims 20-22 and 33-35 are accordingly patentable over the cited combination of references for at least this feature.

Claims 20-22 and 33-35 are further patentable over the cited combination of references because these claims include the features of claims 19 and 31 discussed above with respect to the Section 103 rejection based on Kober and Quinnell, and Hugo fails to overcome the shortcomings of Kober and Quinnell. Therefore, claims 20-22 and 33-35 are further patentable over the cited combination of references.

2. Claims 38-47

Claims 38-47 include independent claims 38 and 42. Claims 38 and 42 include providing a cured fiber-cement panel and driving the punches through only a portion of the thickness of the fiber-cement panel to form a plurality of openings in the fiber-cement panel. This feature of claims 38 and 42 is analogous to that in claim 31, and thus claims 38 and 42 are patentable over the combination of Kober and Quinnell for at least this feature. The additional references cited in the rejection of claims 38 and 42 do not overcome the shortcomings of Kober and Quinnell. Therefore, claims 38 and 42 are patentable over the cited combination of references.

Claims 39-41 and 43-48 depend from independent claims 38 and 42, respectively. As a result, claims 38-48 are patentable over the combination of Kober, Quinnell, Hugo and the Background Information for at least the reasons cited above with respect to the rejection of claim 31 over Kober and Quinnell. The owners of the present application respectively request withdrawal of the rejection of claims 38-48 over this combination of references.

3. Claims 49-55

Claim 49 is directed toward a method of fabricating fiber-cement soffit comprising providing a cured fiber-cement panel and placing the fiber-cement panel between a punch assembly and a support assembly. The punch assembly has a plurality of punches with a first cross-sectional dimension, and the support assembly has a plurality of holes with a second cross-sectional dimension larger than the first cross-sectional dimension of the punches. The method further includes driving the punches along a punch stroke through at least a portion of the thickness of the fiber-cement panel to form openings in the fiber-cement panel that have a first dimension of the punches at one side of the panel and the second dimension of the holes at the other side of the panel. The method further includes pressing a compressible biasing element against the first side of the fiber-cement panel as the punches move along the punch stroke and thereby produce a ventilated fiber-cement

soffit. In rejecting claim 49, the Examiner cites Kober and Quinnell for the same propositions as explained above with respect to the rejection of claim 19, and the Examiner admits that neither Kober nor Quinnell teaches pressing a compressible biasing element against the first side of the cured fiber-cement panel. The Examiner cites Hugo for the proposition that Hugo teaches a power press for punching thick workpieces with a punch that is surrounded by a deformable, elastomeric insert having a striking surface. The Examiner asserts that it would have been obvious to surround the pins in Kober with the annular inserts taught by Hugo to provide a punching arrangement having a "substantially reduced breakage rate in the punching of workpieces."

Claim 49 is patentable over the combination of Kober, Quinnell and Hugo because modifying Kober to include the annular inserts taught by Hugo would mar the surface of Kober's uncured mats. As set forth in the Whitehead 1.132 Declaration at Paragraph 13, Kober's uncured mats would be marred if biasing elements were pressed against the upper surface of the mats during the punching process. PacTool International discovered that biasing elements with high durometers marred the surface of even cured fiber-cement panels, and PacTool developed biasing elements with compressibility properties that would not mar the cured fiber-cement panels. Kober's filamentary mats 3, on the other hand, are significantly more deformable than the cured fiber-cement panels recited in claim 49, and thus the surface of Kober's filamentary mats would deform under the presence of biasing elements. For example, biasing elements would likely leave ring-shaped depressions around the holes. This is particularly the case when using higher durometer biasing elements. A person skilled in the art, therefore, would not modify Kober to use the annular inserts taught by Hugo because doing so would mar the surface of Kober's filamentary mats. Claim 49 is accordingly patentable over the combination of Kober, Quinnell and Hugo.

Claim 49 is further patentable over the combination of Kober, Quinnell and Hugo because the Examiner's reasoning for making the combination is incorrect. More specifically, the Examiner asserts that one of ordinary skill would have been motivated to

surround the pins of Kober with the annular inserts taught by Hugo to provide a punching arrangement "having a substantially reduced breakage rate in the punching of workpieces." Hugo teaches that thin punches break when punching thick metal workpieces. Although this may be true for punching the thick metal workpieces taught by Hugo, it does not follow for application in Kober. More specifically, Kober's punches are not likely to break as they pass through Kober's uncured filamentary mats because the downforce to punch holes through uncured filamentary mats is far less than that for thick metal workpieces. Claim 49, therefore, is further patentable over the combination of Kober, Quinnell and Hugo.

Claims 50-55 depend from claim 49 and are thus patentable over the combination of Kober, Quinnell and Hugo for the reasons explained above with respect to claim 49, and for the additional features of these claims. Claims 52-55, for example, include radial punch-hole clearances that are patentable over the combination of Kober, Quinnell and Hugo for the reasons explained above with respect to claims 20-22. Therefore, the owners of the present application respectfully request withdrawal of the rejection of claims 49-55.

E. Response to Section 103 Rejection of Claims 24 and 25

Claims 24 and 25 were rejected under 35 U.S.C. § 103 over the combination of Kober, Quinnell and Vinson. Claim 25 is the independent claim subject to this rejection, and claim 24 depends from claim 25.

Claim 25 includes several features that are similar to claim 19. Claim 25 further includes providing a cured fiber-cement panel comprising cement, cellulose material and a binder, and claim 25 also includes withdrawing the punches from the fiber-cement panel without delaminating the fiber-cement panel at the apertures formed through the panels. Like claim 19, claim 25 includes penetrating the punches into the panel without passing the punches completely through the panel. Claim 25 is accordingly patentable over the combination of Kober, Quinnell and Vinson for at least the reasons explained above with

respect to claim 19. Therefore, the owners of the application respectfully request withdrawal of the rejection of claims 24 and 25.

F. Response to Section 103 Rejection of Claims 26-30 and 59-61

Claims 26-30 and 59-61 were rejected over the combination of Kober, Quinnell, Vinson, Hugo and the Background Information. Claims 59-61, however, were cancelled in the previous response filed on May 11, 2007. The inclusion of claims 59-61 in this rejection appears to be an oversight.

Claims 26-30 are patentable over the combination of Kober, Quinnell, Vinson, Hugo and the Background Information because these claims depend from claim 25 and include additional features. As set forth above, claim 25 is patentable over the combination of Kober, Quinnell and Vinson for the reasons explained above regarding the patentability of claim 19 over Kober and Quinnell. Claims 26-28 are further patentable over this combination of references for the reasons explained above with respect to claims 20-22. Claims 29 and 30 are further patentable over this combination of references for the reasons explained above with respect to claim 49. Therefore, claims 26-30 are patentable over the cited combination of references, and this rejection should be withdrawn.

G. Response to Section 103 Rejection of Claims 71-75 and 77-81

Claims 71-75 and 77-81 have been cancelled from this paper without prejudice. The owners of the application do not concede to the rejections of these claims for reasons that are analogous to the remarks regarding claim 49 herein. These claims are being cancelled solely to expedite prosecution of the remaining claims in the application, and the subject matter of claims 71-75 and 77-81 is expressly reserved for filing in a continuation application.

H. Response to Section 103 Rejection of Claims 71, 76 and 81

Claims 71, 76 and 81 have been cancelled from this paper without prejudice, and thus this rejection is now moot. The owners of the application expressly do not concede to

this rejection of claims 71, 76 and 81, and reserve the right to pursue the subject matter of these claims in a continuation application.


I. Conclusion

The owners of the present application also expressly contest the Examiner's continued and unfounded position that the applicants have conceded to the Examiner's incorrect findings regarding punch penetration depths and radial punch-hole clearances. As clearly established above, these positions are fully refuted based on the evidence of record and an accurate reading of the references.

In light of the foregoing, all of the pending claims comply with Section 112 and are patentable over the cited references. The owners of the present application respectfully request reconsideration of the application and submit that all of the claims are in condition for allowance. The undersigned representative would like to thank Examiner Butler and SPE Johnson for holding the personal interview on January 24, 2008, and requests that the Examiner call within any questions or comments that would expedite prosecution of the present application.

Dated: Jan. 28, 2008

Respectfully submitted,

By 
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